

Amendments to the Specification

Please replace the paragraph beginning at page 15, line 23, with the following rewritten paragraph:

There is an image formation device such as a color printer that forms color images on a recording medium by using four image formation materials, such as black ink, cyan ink, magenta ink, and yellow ink. When mixing the cyan, magenta, and yellow ink or laying the cyan, magenta, and yellow ink one on another, color the same as or similar to black ink can be obtained. In the observation test chart, therefore, the device may produce a black color pattern using black ink only and may produce a mixed color pattern using cyan, magenta, and yellow ink so that both patterns are located next to each other with a boundary therebetween. When the amounts of at least one of the black, cyan, magenta, and yellow ink used in each pattern change, a color difference occurs between the respective image patterns. The color difference can be properly confirmed visually by the user. When the observation test chart has the K-color region and the CMY mixed-color region, especially when these regions are produced to present intermediate tones, the color difference will appear great for even a slight change in the characteristic of the image formation device. Thus, the user can easily and reliably confirm whether ~~not~~ or not updating is necessary by the visual observation of the test chart.

Please replace the paragraph beginning at page 17, line 2, with the following rewritten paragraph:

It is noted that the tone characteristic setting device may preferably be incorporated, into a computer system, together with an image processing portion for converting original tone data into input tone data to be supplied to the image formation device. The computer system is comprised ~~from~~ of a personal computer, a monitor, a key board, a mouse, and etc. In this case, the monitor is used to display an indication to urge the user to select a desired

colorimeter, and the keyboard or the ~~mouse~~mouse is used to select and input the user's selection. It is possible to successively perform all the processes including: selection of parameters, calculations, output of test image data, input of color measured results, and calculation of tone characteristic data.

Please replace the paragraph beginning at page 24, line 25, with the following rewritten paragraph:

The CPU 11 executes the calibration data preparing program (Fig. 3(a)) to produce a calibration file 50 to be stored in the HDD ~~46~~14. In the calibration data preparing process (Fig. 3(a)), the CPU 11 first controls the printer 2 to print a test chart. The CPU 11 first controls the printer 2 to print a test chart. The CPU 11 then controls the colorimeter 3 to measure colors of the printed test chart. Based on color measurement data received from the colorimeter 3, the CPU 11 calculates a calibration file 50.

Please replace the paragraph beginning at page 33, line 23, with the following rewritten paragraph:

In S202, the CPU 11 checks whether or not there exists, the HDD 14, a usable, correct calibration file 50 that properly matches the printing characteristics selected in S201. It is noted that the actual method used to check in S202 can be optionally selected. In this example, information relating to printing characteristic is stored within each calibration file ~~60~~50, at its data regions d1 - d5, as shown in Fig. 2(a). Accordingly, in S202, the CPU 11 may open up the calibration files 50 in a suitable order, such as by an order of file name or by order of the last updated date, and retrieve the printer characteristic from each file. Once the CPU 11 discovers the file that matches the printer characteristic selected by the processes in S201, then in S202 the CPU 11 can determine that a usable, correct calibration file exists (S202:YES).

Please replace the paragraph beginning at page 41, line 17, with the following rewritten paragraph:

In the printing system of the present embodiment, the printer 2 is an ink jet printer. However, other printers besides ink jet ~~printer~~printers can be used. Any recording method that is capable of performing multi-level tone printing can be used. With any other types of printer, the tone characteristic data can be prepared by the calibration file preparation processes of the embodiments, stored in a calibration data file, and used during printing.

Please replace the paragraph beginning at page 53, line 1, with the following rewritten paragraph:

Accordingly, after inputting the test chart data 160 to the printer 136, ~~then the routine~~the routine then waits for the colorimeter 138 to output the color measurement data 146 in S1110. Once input of color measurement data 146 has started (S1110:YES), then in S1120 the color measurement data 146 is received and stored in the RAM 114. The color measurement data 146 is continued to be written into the RAM 114 until input of the color management data 146 has been completed. When input is completed, the retrieval operations of the color measurement data is ended (S1130:YES).

Please replace the paragraph beginning at page 69, line 2, with the following rewritten paragraph:

First, a standard printer 136 in the predetermined standard printing characteristic is used to print a square pattern, such as 2 mm by 2 mm square in an intermediate tone, such as ~~50-%~~50% black, on a print medium with black ink. Then, the colorimeter 138 is used to measure color of the ~~50-%~~50% black pattern, and to produce color measurement data CK $50\% = (X_{50}, Y_{50}, Z_{50})$ represented by the XYZ colorimetric system (CIE 1931 color system).